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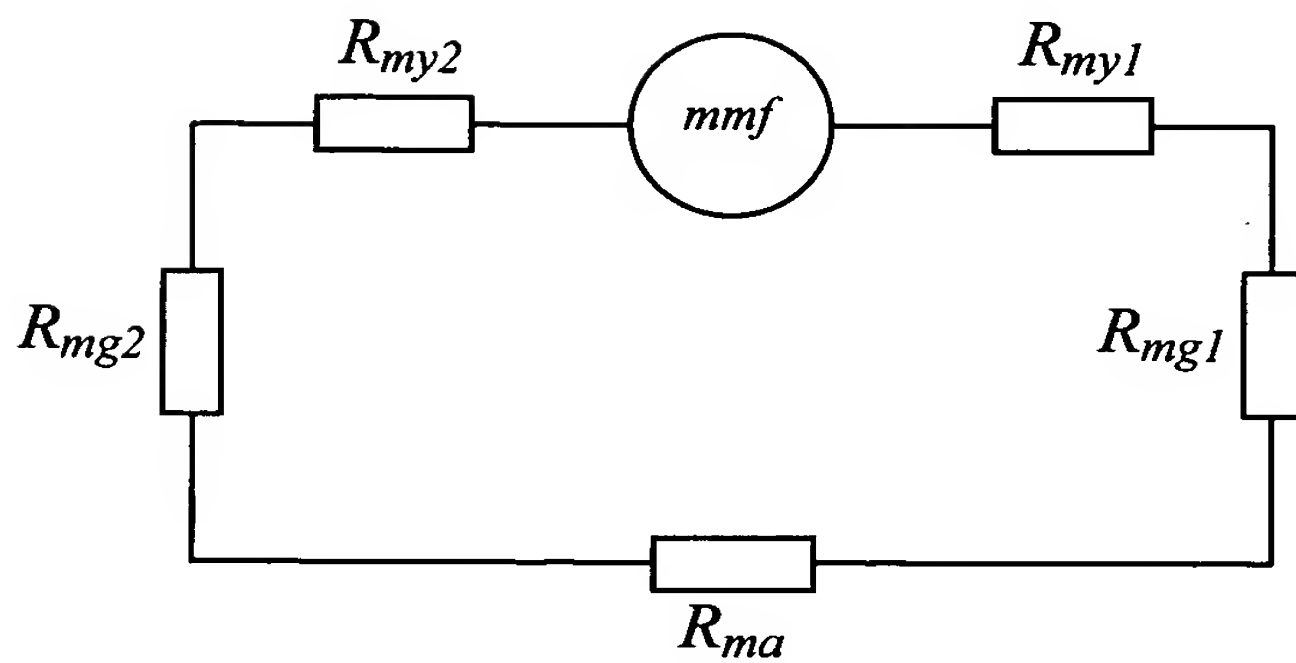
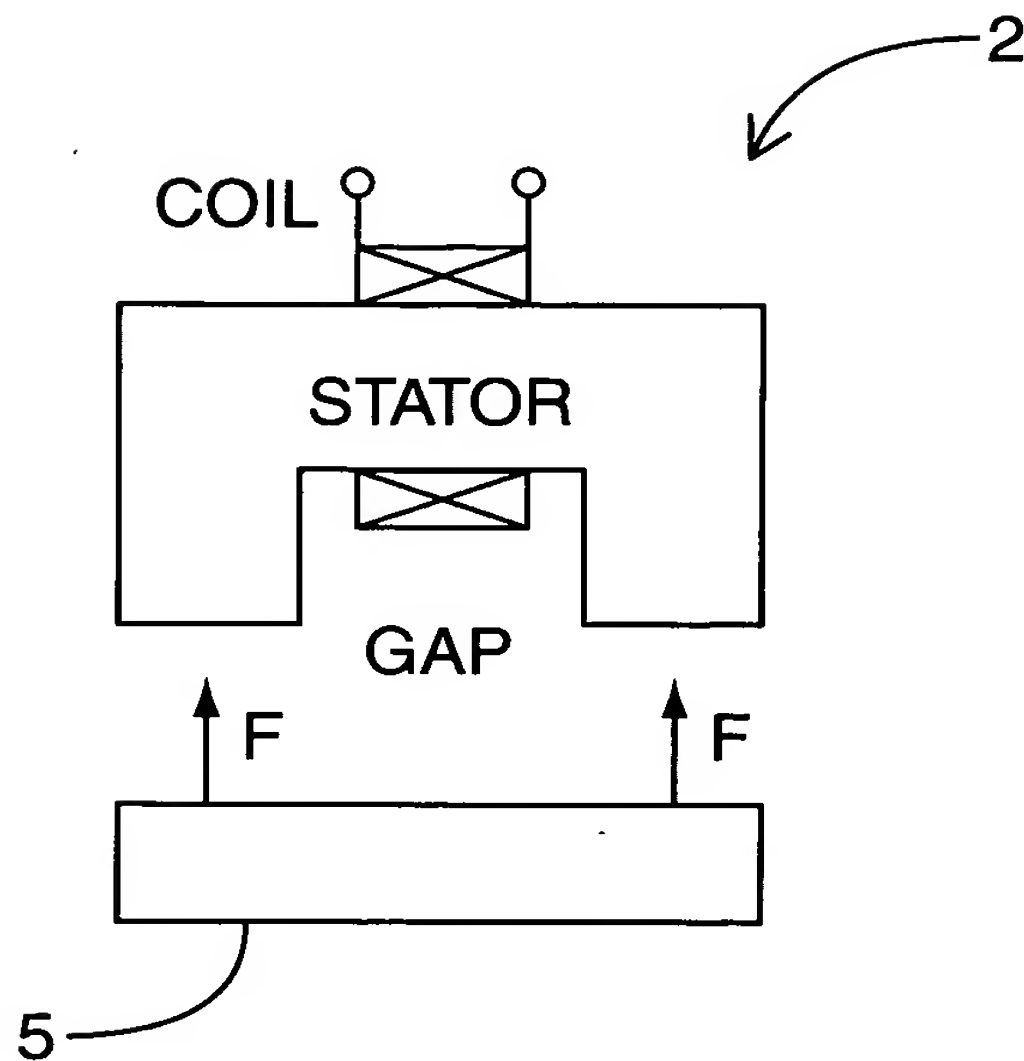
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$$mmf = N \oint I$$

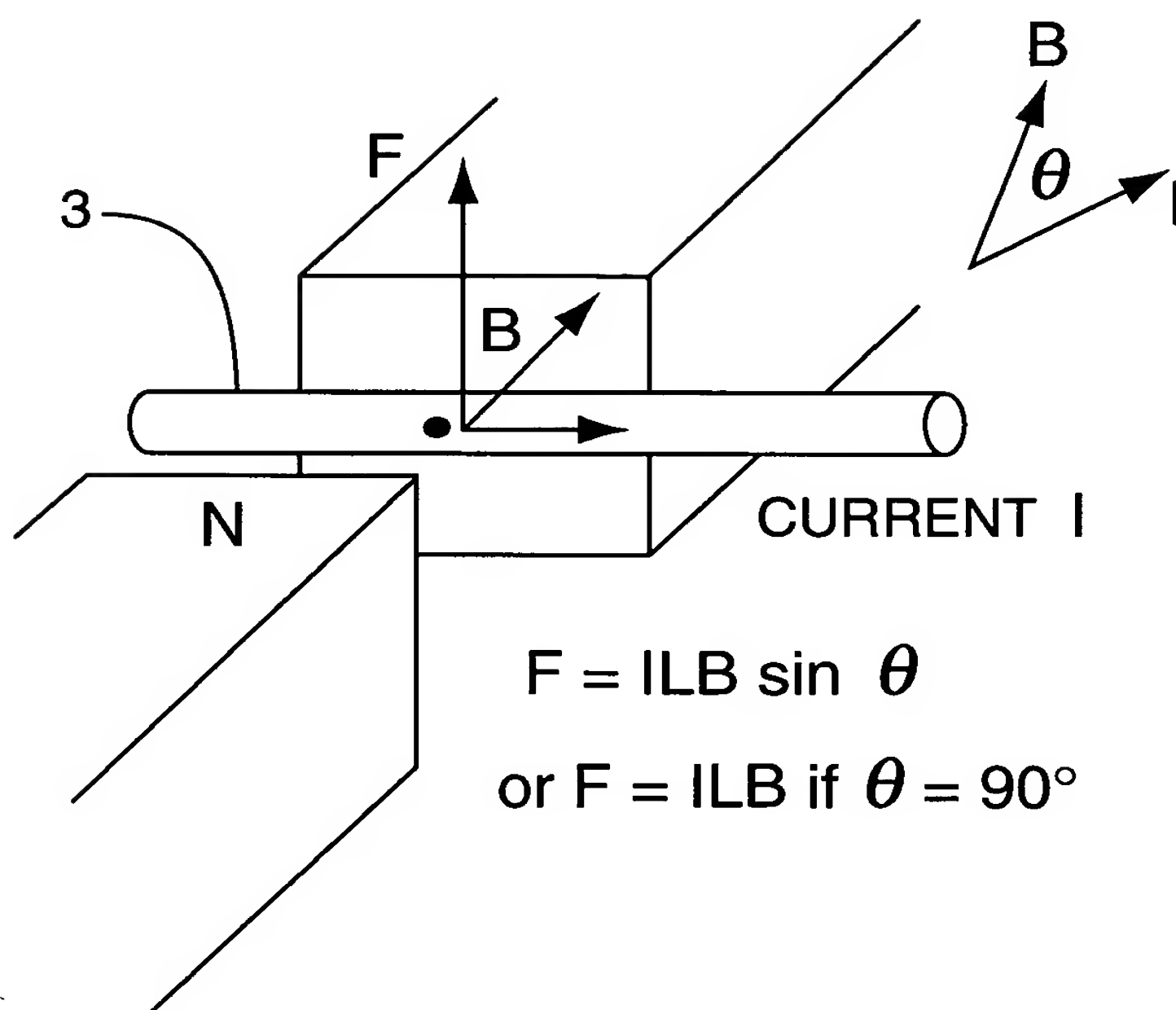
$$R_{mk} = \frac{L_{mk}}{\mu_{mk} \oint A_{mk}}$$

$$R_{me} = \sum_k R_{mk}$$

$$\Phi = \frac{mmf}{R_{me}}$$

$$F = \frac{\Phi^2}{2 \oint \mu_0 \oint A}$$

FIG. 1  
PRIOR ART



$$F = ILB \sin \theta$$

or  $F = ILB$  if  $\theta = 90^\circ$

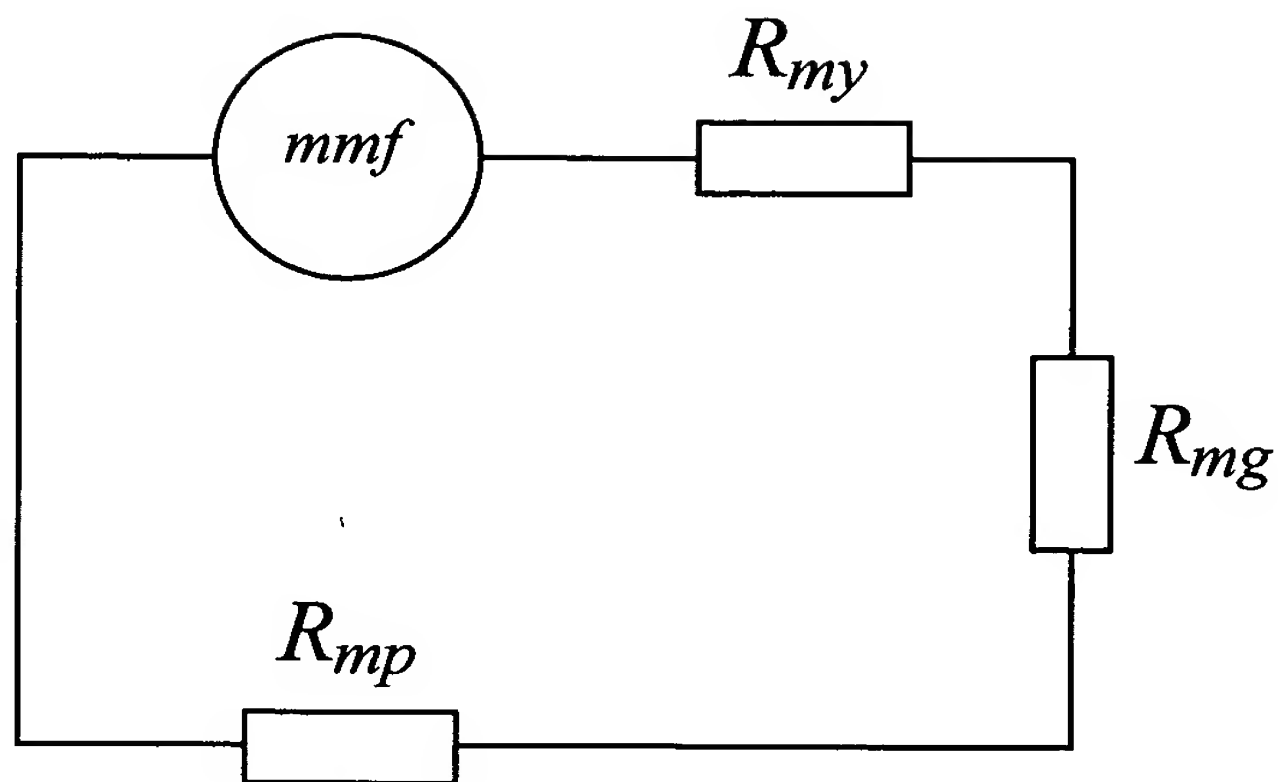
$$F = qvB \sin \theta$$

$$F = q \frac{L}{t} B \sin \theta$$

$$F = \frac{q}{t} LB \sin \theta$$

$$F = ILB \sin \theta$$

FIG. 2  
PRIOR ART



$$mmf = N \oint I$$

$$R_{mk} = \frac{L_{mk}}{\mu_{mk} \oint A_{mk}}$$

$$R_{me} = \sum_k R_{mk}$$

$$\Phi = \frac{mmf}{R_{me}}$$

$$F = -\frac{1}{2} \oint \Phi^2 \oint \frac{dR_{mg}}{dx}$$

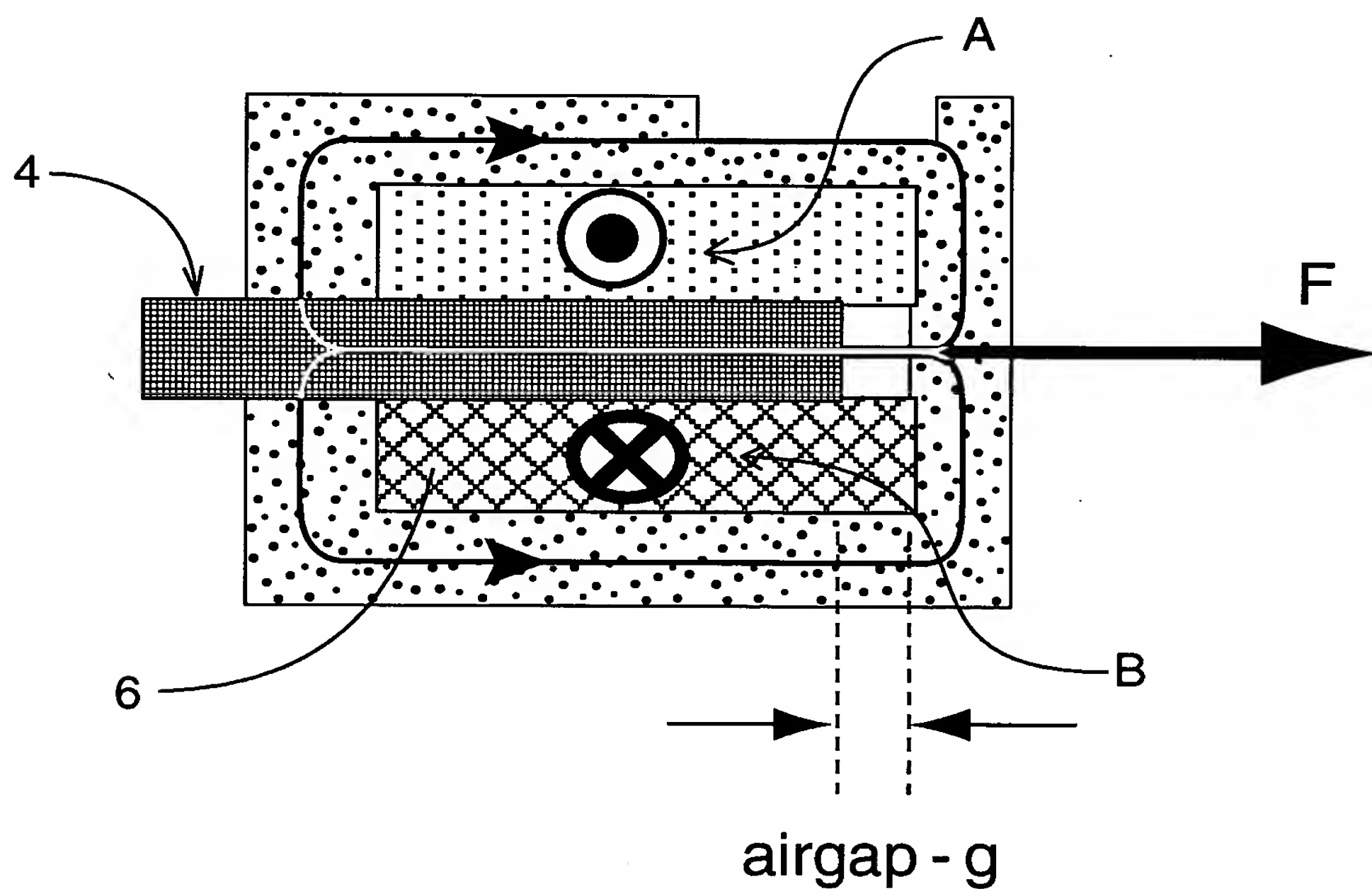
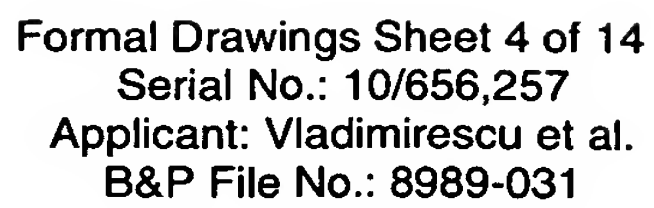


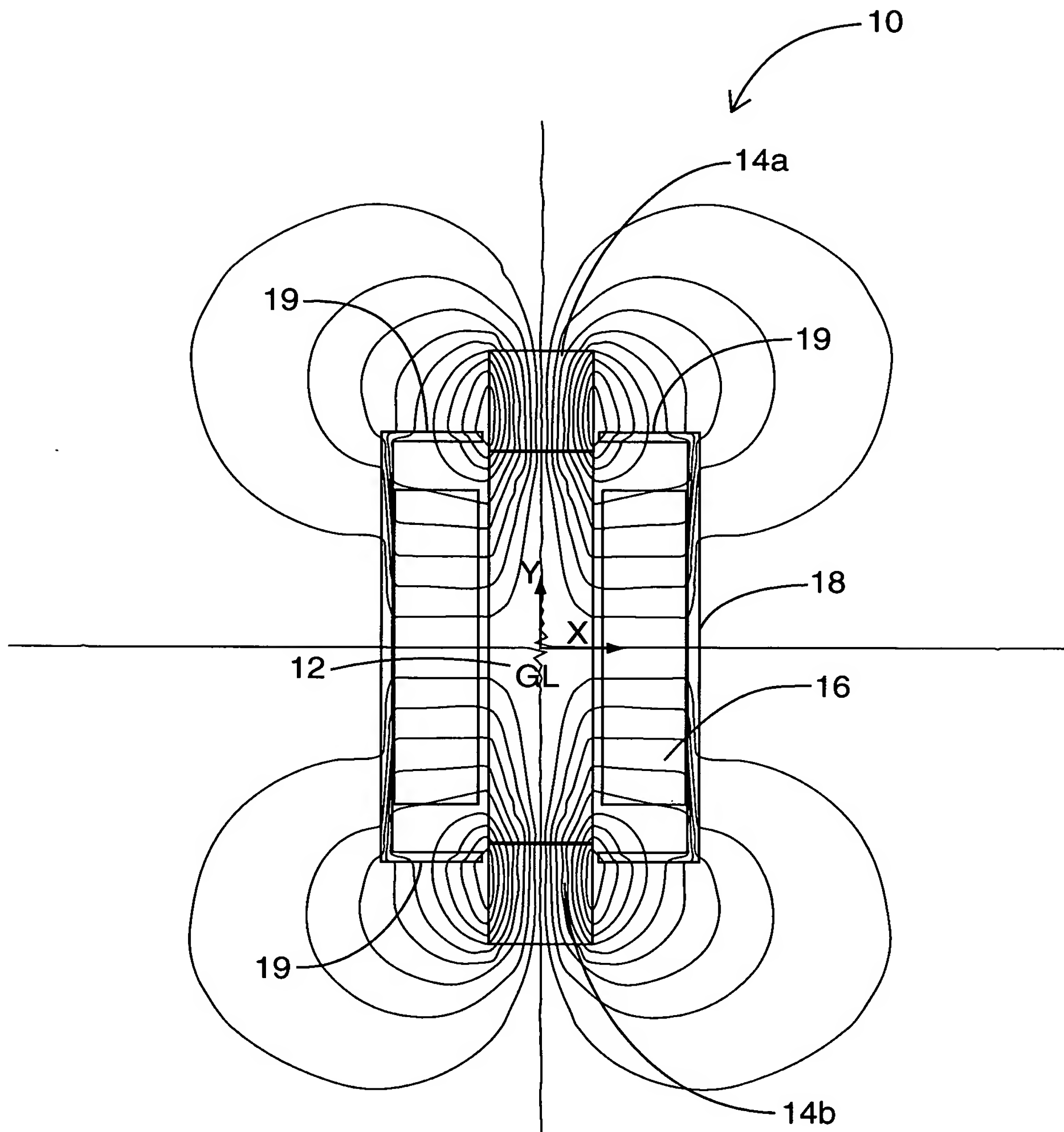
FIG. 3  
PRIOR ART



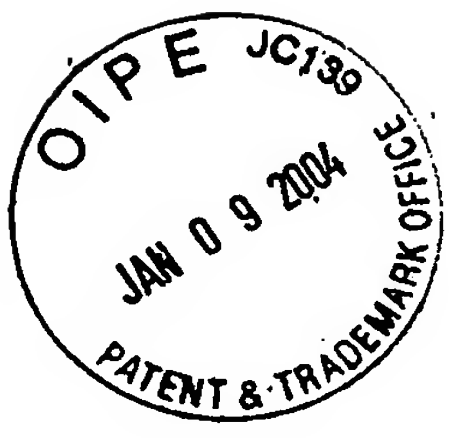
**FIG. 4**



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**FIG. 5A**



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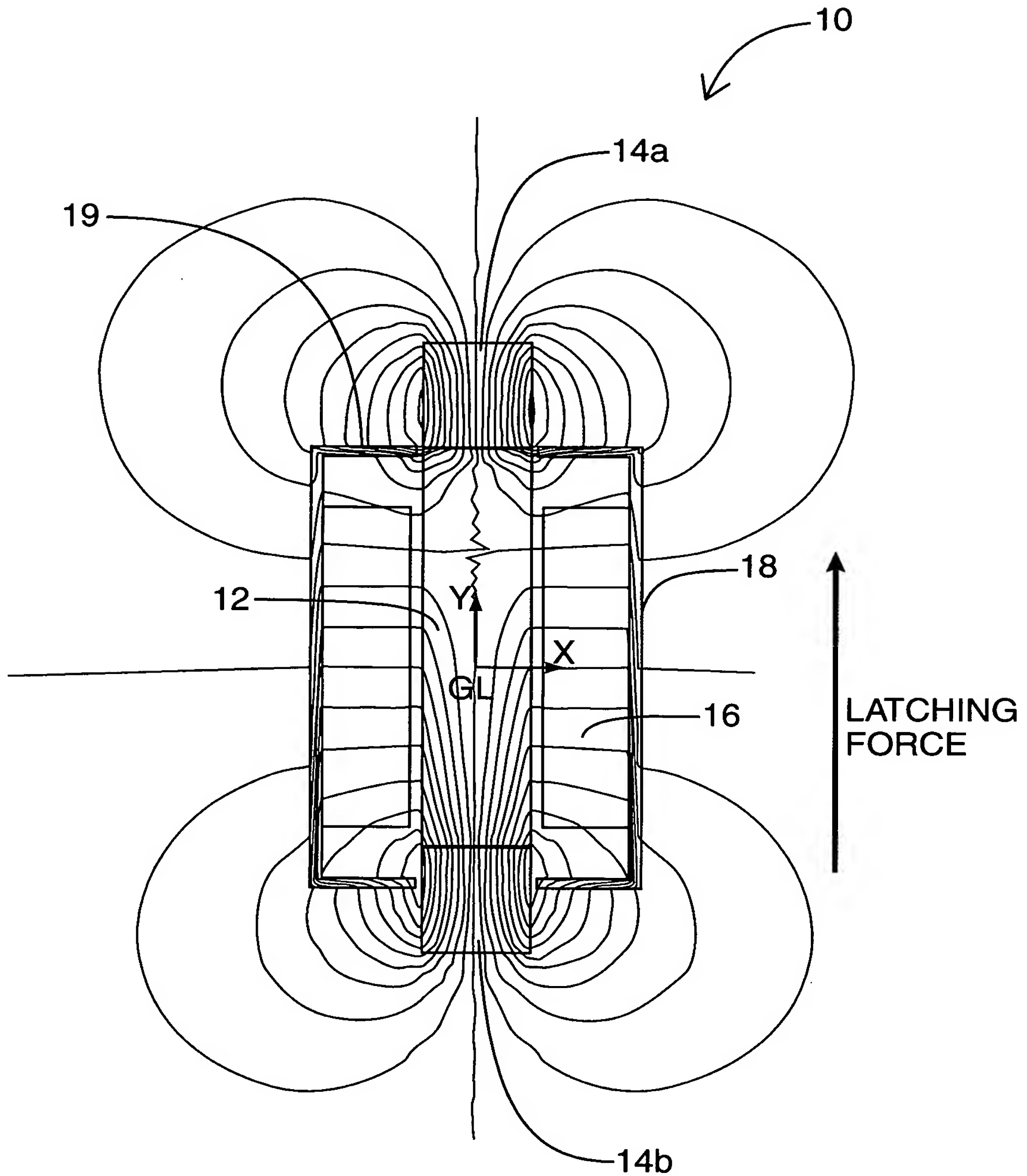
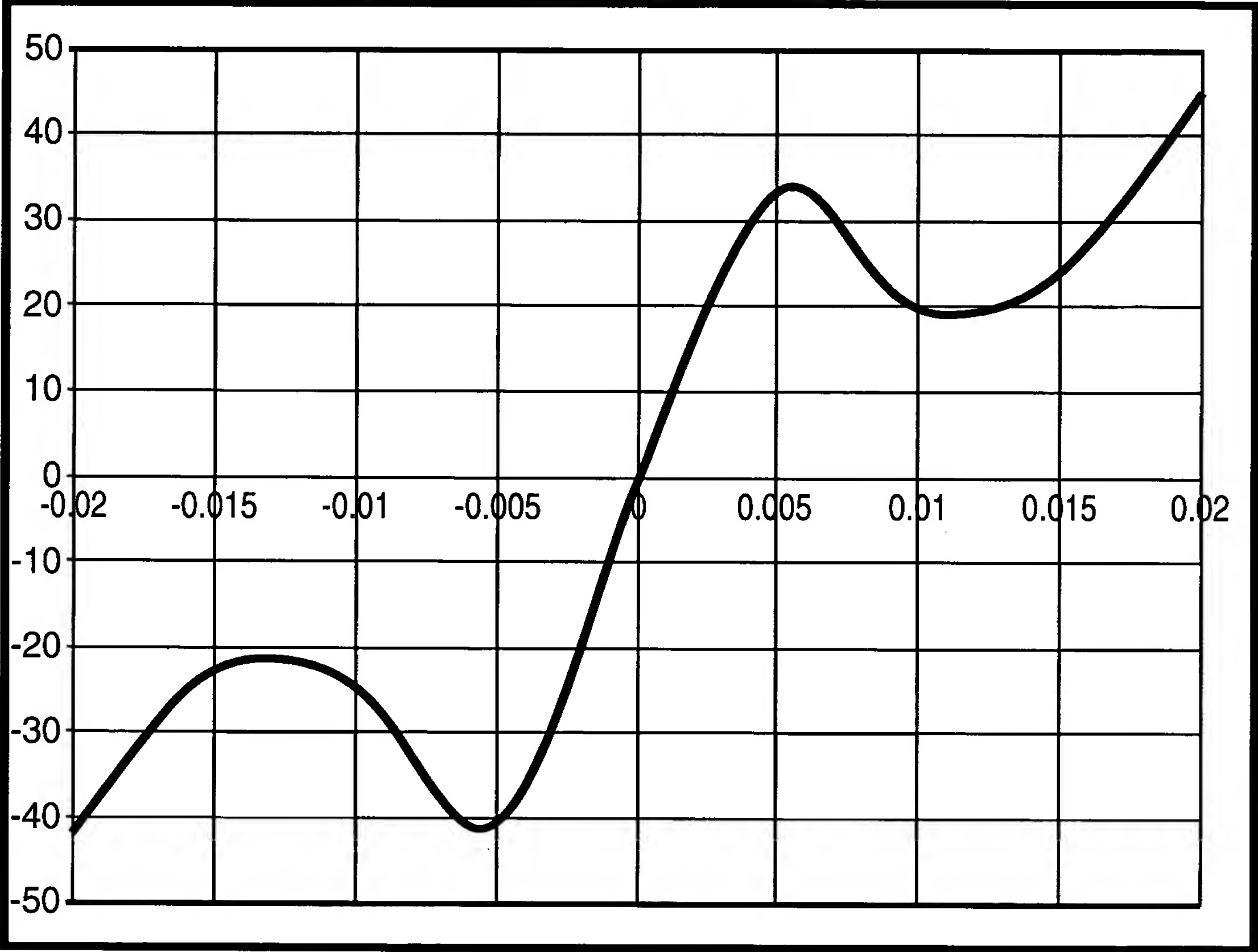


FIG. 5B



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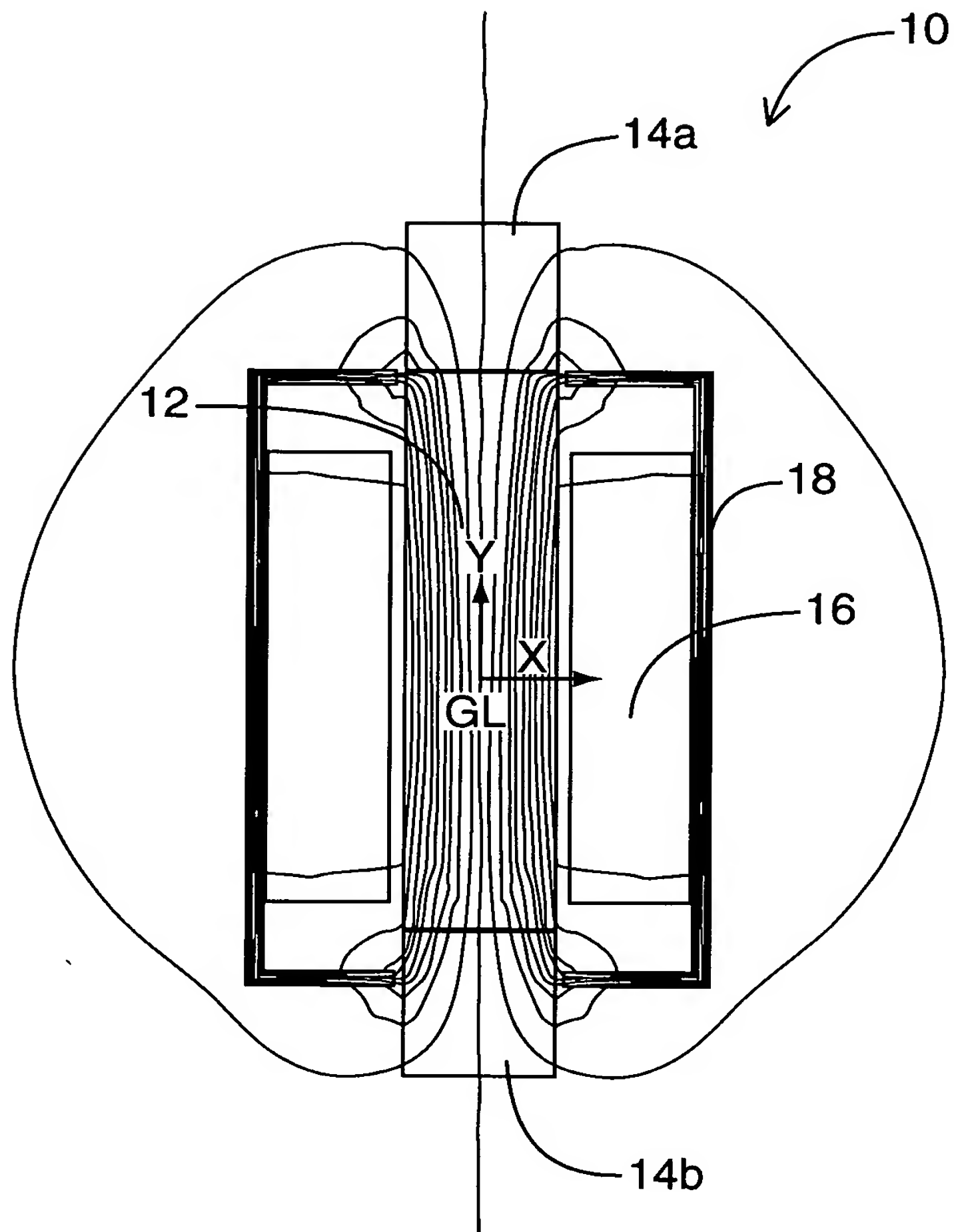
**LATCHING FORCE (GRAMS)**



**POSITIONAL DISPLACEMENT  
(INCHES)**

**FIG. 5C**





**FIG. 6**



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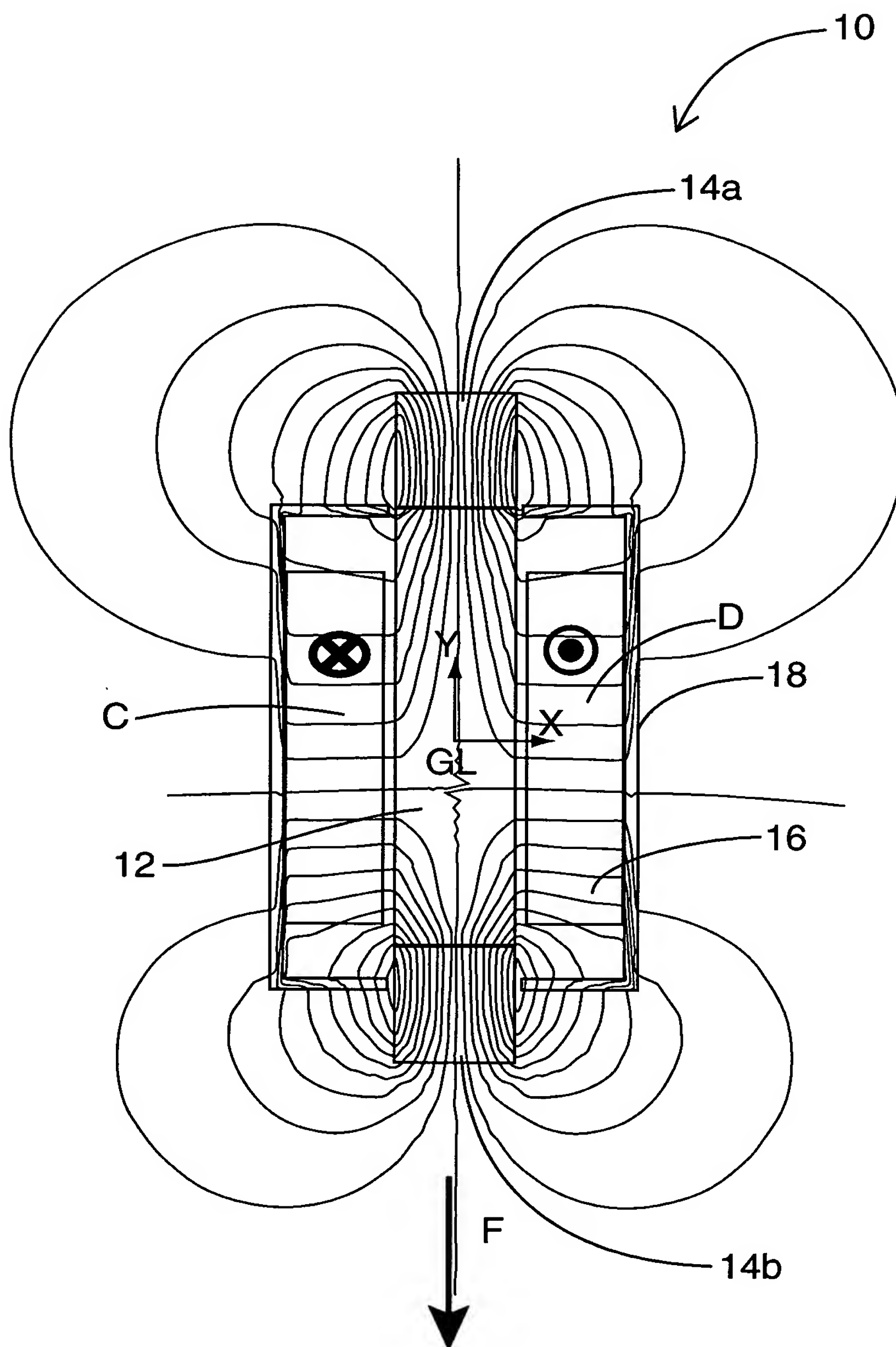
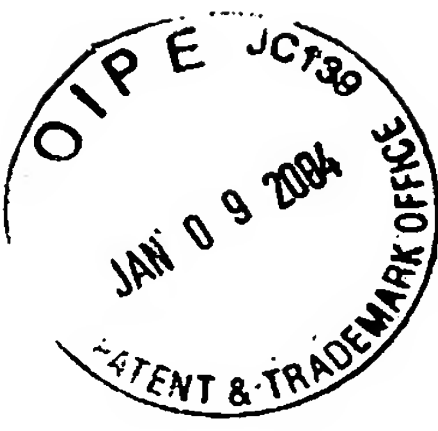


FIG. 7A



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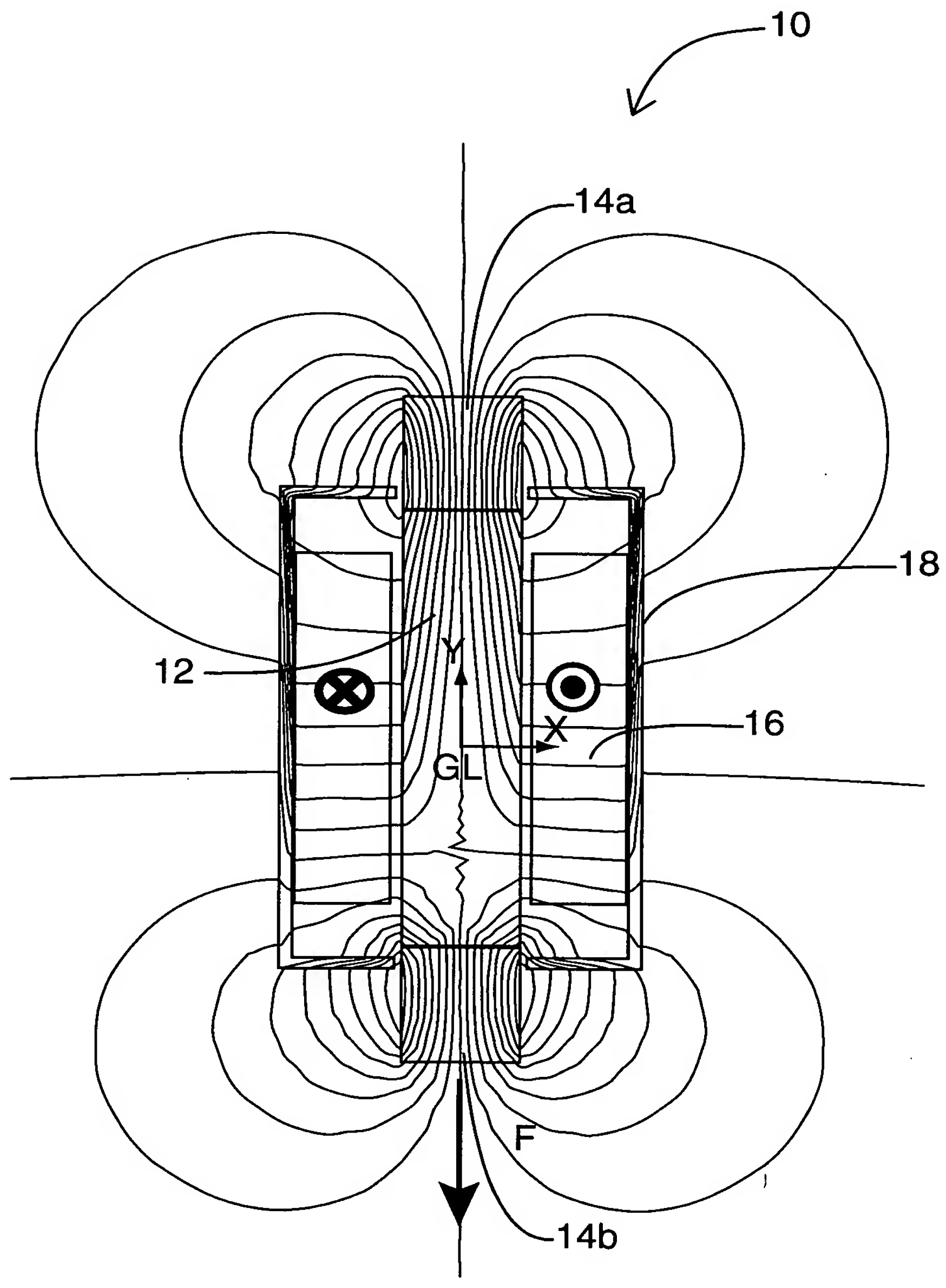
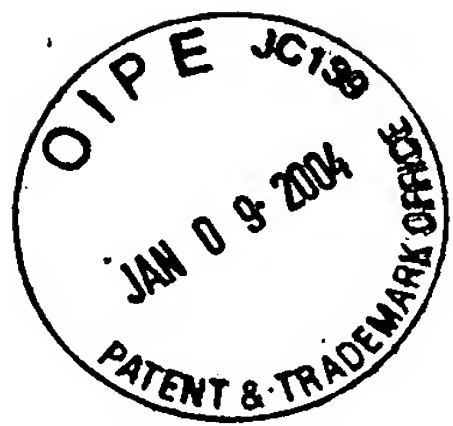


FIG. 7B



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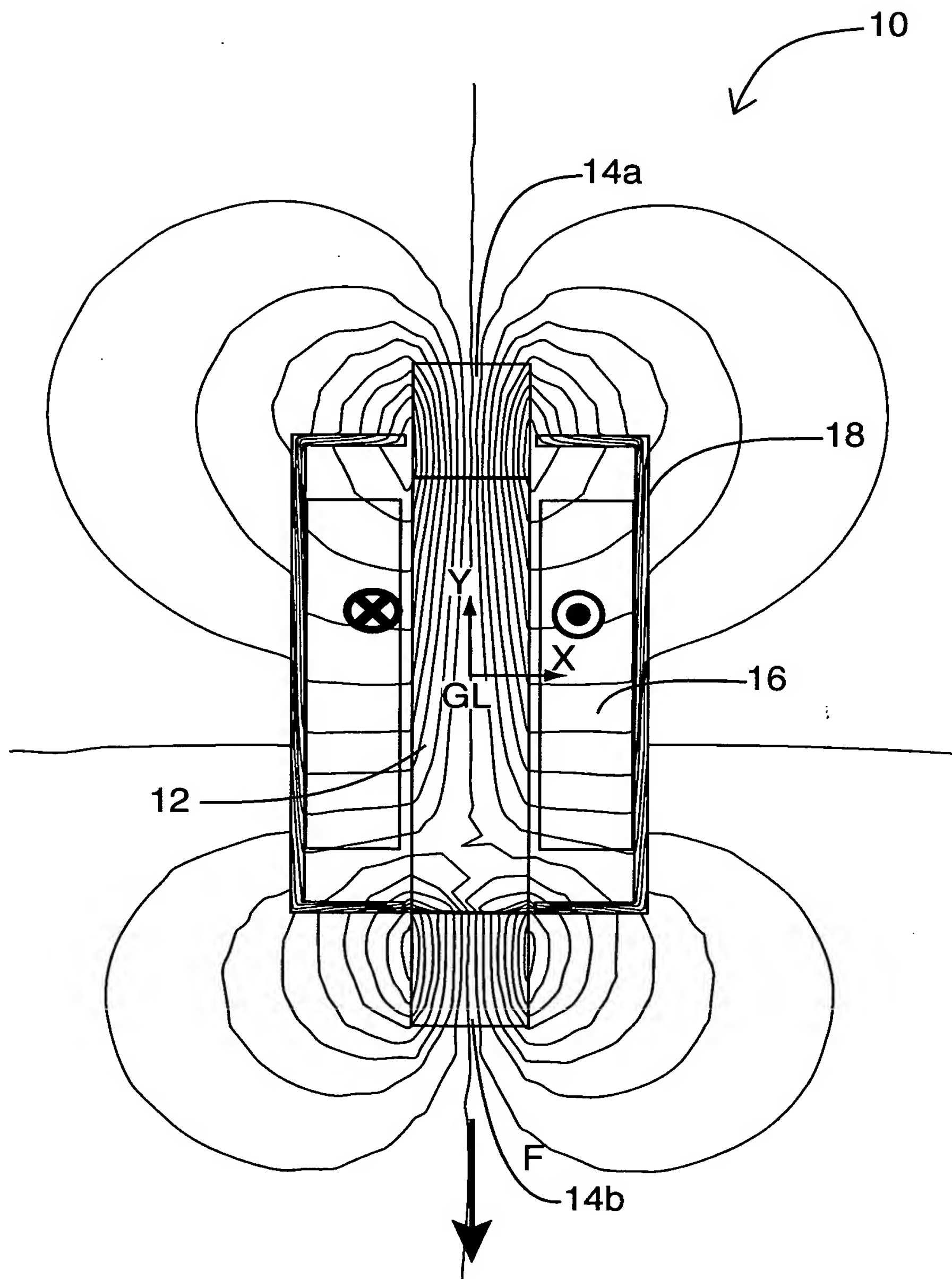
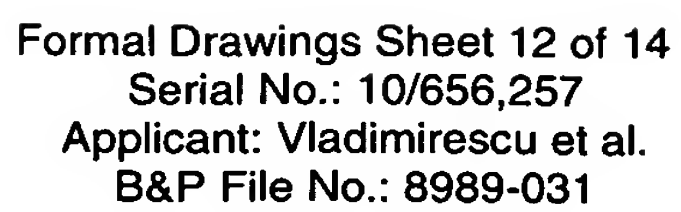


FIG. 7C



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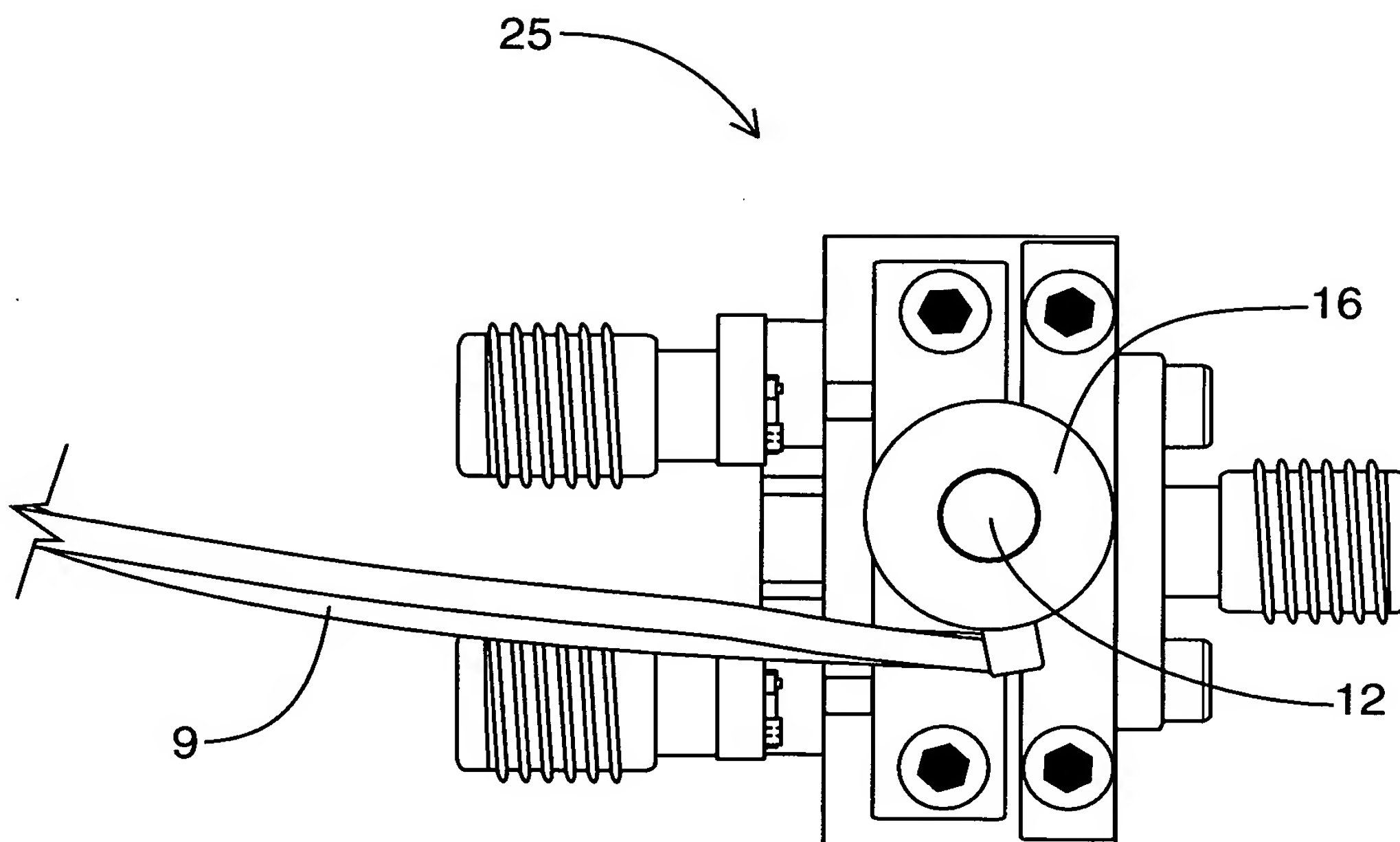


FIG. 8B

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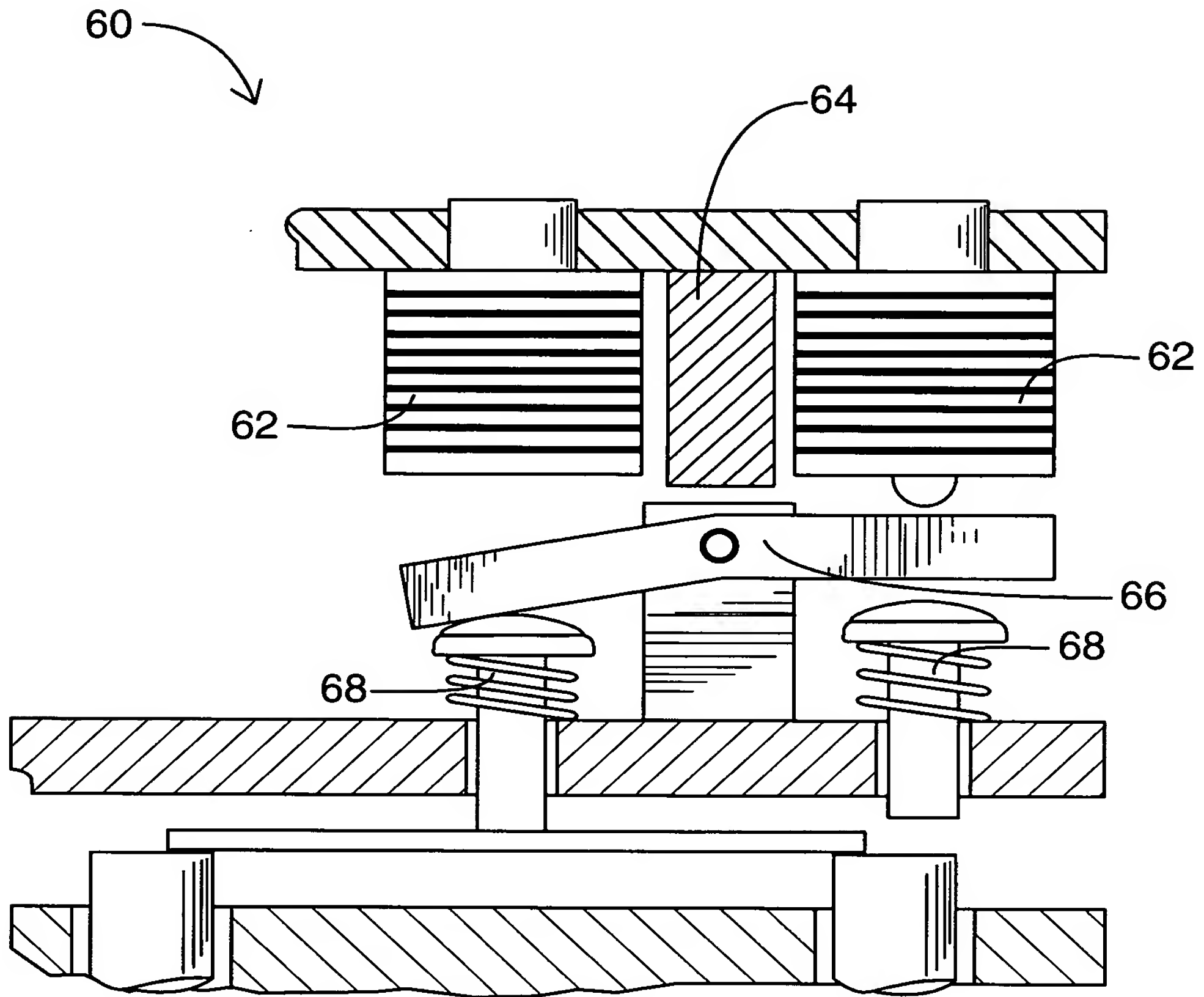


FIG. 9  
PRIOR ART